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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/771,846

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Olaf Muller

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7590

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EXAMINER

CULBRETH, ERIC D

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/771,846	Applicant(s) MULLER	
	Examiner Eric Culbreth	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-86 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27, 38-54, 58-62, 64, 67-73, 76-81 and 83-86 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 28-37, 55-57, 63, 65, 66, 74, 75 and 82 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/14/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 28-37, 55-57, 63, 65-66, 74-75, and 82 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention or species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/26/06.
2. Applicant's election with traverse of Group I, Figures 1-5 in the reply filed on 5/26/06 is acknowledged. The traversal is on the ground(s) that it would not be a serious burden on the examiner to examine all the species at one time. This is not found persuasive because it would indeed be a serious burden to locate and apply art to the four mutually exclusive embodiments claimed.

The requirement is still deemed proper and is therefore made FINAL.

Priority

3. In order to ensure proper consideration, applicant should supply a copy of the foreign art cited on page 1 of the specification with the next correspondence.

Drawings

4. The drawings are objected to because of the following informalities. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- a. Paragraph [0007] (07), last line, is not clear (i.e., no figure numbers are given).
- b. Figures 3a-3c should not be connected (paragraph 32).
- c. Figures 10-11 should not be connected (paragraph 36).
- d. In Figure 1, there are no arrows on the lead lines to the blocks (which way does input or information flow?).
- e. Contrary to paragraph 50, line 5, reference numeral 13 does not refer to a carriage in Figure 2.
- f. In fact, in paragraph 50 reference numeral 13 is a sled, but in paragraph 51, line 45, reference numeral 13 refers to status detection means; a reference numeral

should only refer to one part of the invention. The specification and drawings should be carefully reviewed and rewritten.

g. Paragraph 61 is not understood (what are the upper and lower parts in the drawings?).

h. Reference numeral 19 (paragraph 62, line 2) is not on the drawings.

i. Generally paragraph 62 is not clear, possibly due to reference numeral 19 being missing from the drawings and poor illustration in Figure 5.

j. Throughout paragraph 49, reference numeral 6 refers to detection means, but in paragraph 67, line 10 reference numeral 6 refers to deformation means. Again, a reference numeral should refer to only one part of the invention.

k. Reference numeral 39 (paragraph 67, line 13) is not on the drawings.

l. Comparing Figures 6 and 8, the shape of part 36 changes. Hence, the structure is not clear.

m. Reference numeral 23 (paragraph 68, line 2) is not on the drawings.

n. In paragraph 69, line 1 apparently reference numeral 45 should apparently be 42 (there is no reference numeral 45 on the drawings).

o. In Figure 9, sections lines Y and Z should be "10-10" and "11-11" respectively, as section lines should be named for the Figures they represent (see paragraph 94).

p. Reference characters S' and S" (paragraph 89, line 6, paragraph 91, the remainder of the specification) are not on the drawings.

q. Bolts 10 and 11 in Figure 2 are different from the bolts in Figures 10 and 11 but have the same reference numeral (i.e., the bolts in Figures 2 are explosive; compare paragraphs 89 and 91); again, it is noted that different reference numerals should refer to different parts.

r. Paragraph 90, lines 1-2 state that part 47 is the smaller charge, but charge 48 is smaller in Figure 9.

s. Noting Figure 10, it is not clear where bolt 11 is in Figure 9.

t. Regarding paragraph 117, line 1 and the remainder of the specification, it is not clear what FMVSS 208 is.

u. Paragraph 120, last line states to see the illustration of the active airbag lid, but no such illustration is given in the drawings.

v. Some of the reference numerals in Figure 16 are 90 degrees offset from what they should be.

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electrical device (claims 3 and 17), material deforming bolts (claim 7), driver's size, weight and posture and height sensors (claims 8 and 27), electrical and optical switch (claims 13 and 14 and 25-26), releasable rivet (claim 60) and sheet metal plate member(s) (claims 46-47 and 52-54) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no support in the specification for the energy generator being an electrical device (claims 3 and 17) nor for size, weight, height and posture sensors (claims 8 and 27). There is no support in the specification for claims 13-14 nor claims 46-47 and 52-54. There is no support for a releasable rivet (claim 60).

8. The disclosure is objected to because of the following informalities.

Appropriate correction is required.

- a. In paragraph 7, line 13 “[and]” should apparently be deleted.
- b. In paragraph 9, line 1 “according to may have” is unclear.
- c. In paragraph 9 line 3 “cam” should be “can”.
- d. In paragraph 10, line 1 one instance of “according to” should be deleted.
- e. In paragraph 12, line 6 “parts” should be “part”.
- f. Paragraph 23, lines 1-4 are an incomplete sentence.
- g. Paragraph 23, lines 4-8 contain an incomplete sentence.
- h. Paragraph 51, last line is not clear (“sheet 12 has to be deformed itself and/or against the bolts 10 and 11”).
- i. In paragraph 59, “screwings” should apparently be “screws”.
- j. Paragraph 69, lines 1-2 are an incomplete sentence.
- k. Paragraph 72, last 3 lines are an incomplete sentence.
- l. In paragraph 73, line 5 “grooves/form” is not understood.

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- m. In paragraph 82, line 2 “to” should precede “act”.
- n. In paragraph 87, line 3 and the remainder of the specification, “column” should follow “steering”.
- o. Paragraph 87, line 4 has a dangling phrase (“, the sled guiding casing”).
- p. Regarding paragraph 87, line 5 it is not clear what “the pointed wall” and “the dash assembly” are in the invention.
- q. In paragraph 87, last line “reference to the accident event” is unclear (i.e., the wording is awkward and hence unclear).
- r. In paragraph 92, line 3 “tunes” should be “tuning”.
- s. Regarding paragraph 95, line 7 it is not clear how bolts 10 and 11 are unlocked (there were not described as lockable before).
- t. In paragraph 125, line 4 “steering” should apparently be “steering column”.
- u. In paragraph 125, line 5 “steering” should be “steering column”.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1-27, 39-54, 58-62, 64, 67-73, 76-81, and 83-86 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly

connected, to make and/or use the invention. Regarding paragraph 55, lines 1-4, it is not clear what igniting only the charge in bolt 11 will do. (Bolt 10 is closer to where deformation will occur in Figure 2.)

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-27, 38-54, 58-62, 64,67-73, 81 and 84 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 1, line 1, "can be" is indefinite (this is not a positive limitation, as anything "can be" done to an invention).

b. In claim 1, line 3, there is no antecedent basis for "the steering column" (in fact, a steering column is later recited in claim 1(a), so this is also a double inclusion).

c. In claim 1(a), line 1 "parts" should be "part".

d. In claim 1(d), lines 1-2, "the driver who is seated" is a non-positive limitation (a better recitation might be "the driver when seated").

e. In claims 7 and 19, "material deforming bolts" is not understood from the specification (there has been no disclosure of such bolts in the specification).

f. The recitation in claim 8 of sensors sensing driver's seat position and seat belt fastening status is a double inclusion of the sensors already recited in claim 1(c) and 1(d).

g. Further in claim 8, it is not clear how the sensor would sense driver's size in addition to driver's weight.

h. Similarly, in claim 8, it is not clear how the sensors provide outputs about the driver's seat position in addition to driver posture (this appears to be a double inclusion).

i. In claim 10, line 3 there is no clear antecedent basis for "the steering wheel" (claim 1 never positively recited a steering wheel).

j. In claim 15, line 1 "can be" fails to positively recite structure.

k. In claim 15, line 3 there is no antecedent basis for "the steering column".

l. In claim 15, line 3 from the end, it is not clear which "triggerable unlocking device" is meant, as claim 15(e)(iii) recited an unlocking device for each of two locks.

m. Subparagraphs g and h above apply to claim 20 also.

n. In claim 22, line 3 there is no clear antecedent basis for "the steering wheel".

o. In claim 24, it is not clear which load absorber is meant, as a pair of load absorbers were recited in claim 15.

p. In claim 38, line 5 "can be" fails to positively recite structure.

q. Claim 54 is not clear because there is no disclosure of this in the specification.

r. In claim 69, line 3 "when the load absorber is unlocked" is a negative limitation (the load absorber has not been previously defined as unlocking).

s. In claim 73, there is no antecedent basis for "the power unit".

- t. In claim 81, it is not understood what is meant by “a tearing of metal” (this is not disclosed anywhere in the specification).
- u. In claim 84, it is inaccurate to recite the load absorption as rendered active by a locking action (it is already locked).
- v. Claims 46-47 and 52-54 are not clear because there is no disclosure of a sheet metal plate with a tearing seam.
- w. Claim 62 would not appear to be accurate to the elected embodiment.
- x. In claim 73 there is no antecedent basis for “the power unit”.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 38-41, 46-47, 52-54, 62, 68, 73 and 76 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Browne (US Patent 4,886,295).

Browne discloses a telescoping steering column for a motor vehicle in which upper part 30 telescopes with respect to lower part 28, the lower part being fixed relative to the vehicle. A detector 96 receives input correlated with parameters related to a driver of the vehicle, and a coupling 70, 84 interconnects the telescoping parts and can be arranged in a plurality of different operative configurations (bag 70 is adjusted to different configurations or amounts), and a controller 82 responsive to sensor 96

selectively pre-configures the coupling to the different operative configurations upon a driver entering the vehicle and prior to an accident (column 4, lines 40-56)(claim 38).

As broadly recited, spilt sleeve 84 with balls 90 serve as at least one lockable load absorber (the structure serves to lock the steering column upper part in place inasmuch as applicant's lockable bolts, which still allow the upper column part to move even while locked during an accident)(claims 39 and 76).

The coupling includes a plurality of lockable load absorbers (balls 90)(claim 40).

The balls 90 can be tailored to several load absorbing levels by tightening sleeve 84 (claim 41).

Claims 46-47 and 52-54, in reciting tearing sheet metal, are so indefinite that Browne meets the positive limitations of the claims.

Similarly, claim 62, in reciting a deformable tube that is not disclosed in the elected embodiment, is so indefinite that Browne meets the positive limitations of the claim.

Regarding claim 68, load absorber 70, 84, 90 is mounted on a sled 56 that is attached to the upper part 30 of the steering column.

Regarding claim 73, in view of the indefinite recitation (no antecedent basis for "the power unit"), Browne meets the positive limitations of the claim.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 43, and 45 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of WO 98/22325 (cited by applicant).

WO '325 discloses a system in which at least one load absorber 22 is switched between locked and unlocked position by a solenoid 19, operated by controller or switch 23 depending on if the seat belt is buckled. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Browne to include a load absorber locked when a seat belt is not used in order optimize energy absorption whether or not the driver is wearing a belt (abstract of WO '325). The controller of Browne would also control the solenoid of WO '325 in the combination, as the controller controls the absorber overall (claim 43).

The solenoid would be switched in steps (switched closed and opened)(claim 45).

Allowable Subject Matter

17. Claims 1 and 15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

18. Claims 2-14, 16-27, 42, 44, 48-51, 58-61, 64, 67, 69-72, 77-81, and 83-86 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd


paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Eric Culbreth
Primary Examiner
Art Unit 3616